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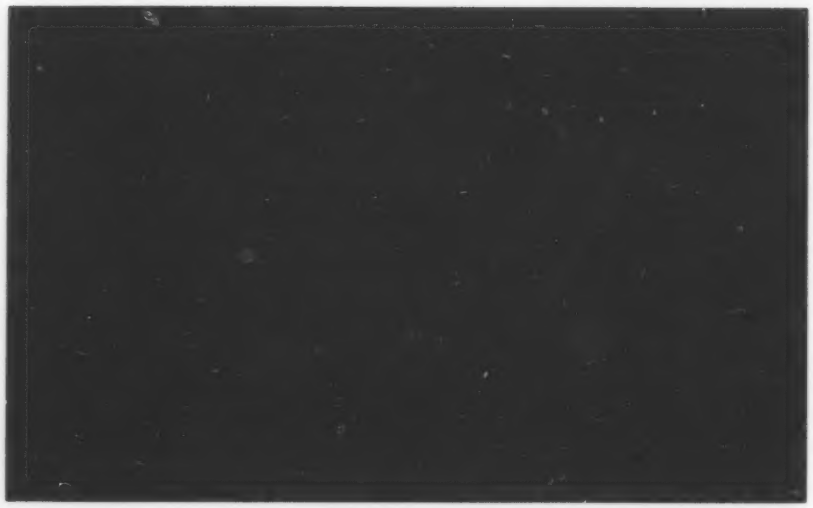

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CRT-727

The Analysis and Interpretation of Canadian Transportation Aid Policy

by

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The author wishes to thank Brian Helm and two anonymous referees for many helpful comments on an earlier version of this paper.

October 1990 – revised September 1992

Dépôt légal – Bibliothèque nationale du Québec,
Bibliothèque nationale du Canada, 1992

ABSTRACT

All societies must organize the surface on which they operate. This practice produces a network of circulation that characterizes the geographic environment. Obviously, the physical barriers to movement over space have to be reduced to a minimum. Indeed, the conquest of distance is so fundamental to geography that development cannot occur without movement. Distance can be measured in terms of time and cost, and an emphasis on distance is an emphasis on extent. Indeed, the distance reached provides a record of the extent to which a society has shaped terrestrial space and, in so doing, has shaped itself. Recent projections call for an increased transfer of transportation aid to Third World countries where diversity, distances and population growth accentuate problems of transportation and generate obstacles to the mobilization of resources for development. This paper first examines the problems and the transportation needs of Third World countries, notably landlocked countries. The Canadian response is then examined with particular attention to the characteristics, the evolution and the magnitude of transportation aid. The article concludes on an evaluation of the Canadian transportation aid policy in the context of recent policy changes.

Key words: Aid, transportation, Canada, Third World.

RÉSUMÉ

Toutes sociétés se doivent d'organiser la surface sur laquelle elles opèrent. Cette pratique spatiale produit un réseau de circulation qui caractérise l'environnement géographique. Evidemment, les obstacles physiques aux mouvements sur le territoire doivent être réduits au minimum. En effet, la conquête de la distance est tellement fondamentale à la géographie que le développement ne peut se produire sans mouvement. La distance se mesure en termes de temps et de côuts, et mettre l'accent sur la distance c'est dans une certaine mesure privilégier l'étendue. En effet, les distances atteintes dénotent l'état de l'espace terrestre faconné par une société, et de cette manière, comment une société s'est elle-même transformée. De récentes projections font appel à des transferts accrus d'aide dans le domaine des transports vers les pays du Tiers-Monde où la diversité, les distances, et les croissances de population accentuent les problèmes de transport et font obstacle à la mobilisation de ressources pour le développement. Cet article examine d'abord les problèmes et les besoins de transport des pays du Tiers-Monde, notamment les pays enclavés. La réponse canadienne est ensuite examinée en portant une attention particulière sur les caractéristiques, l'évolution et la taille de l'aide canadienne dans le domaine des transports. L'article conclut sur une évaluation de la politique canadienne d'aide aux transports dans le contexte des récents changements de politiques gouvernementales.

Mots-clés : Aide, transport, Canada, Tiers-monde.

INTRODUCTION

Transport systems issued from colonization and completed with three decades of development under the direction of politically independent states present several inadequacies (Domingo, 1985). More specifically, Third World transport systems are marked by contradictions. Territorially, networks are characterized by the importance of penetration axis from core regions, and problems of accessibility in the periphery. Technologically, the transport sector is a dual economy. Traditional means of transport exist in large numbers alongside a growing modern transport system. Socially, there is a strong inequality of access between urban and rural inhabitants (Taaffe, Morrill and Gould, 1963). There is thus a great diversity of transport policies among Third World countries depending on the difficulty of the physical environment, the conditions of the existing network, the level of technical means, and the availability of financial resources. Some governments have emphasized the construction of routes emanating from penetration axis with a view to create a network of cities. The Malagasy road between Sambava and Andapa, for example, has allowed the establishment of 30 villages (Wolkowitsch, 1970). Others, such as Mexico, have enhanced modern means of transportation in order to promote national development (Goldfrank, 1976). But the creation of new axes can increase regional inequalities by preventing the growth of peripheral towns (Gauthier, 1970). Besides, it has been demonstrated that transport is at best concomitant with economic development (Hurst, 1974).

This paper will seek to examine the hypothesis according to which regional transportation assistance to developing countries, more specifically to landlocked and transit countries jointly, plays an important role in the

development process of the Third World. The objectives of the following pages will be first to discuss the evolution of the transport sector in developing countries; second, to analyze the problems and transportation needs of landlocked countries; third, to examine the Canadian response in respect to the transportation problems of Third World countries with particular attention to the characteristics, the evolution, the magnitude and the distribution of transportation aid; and fourth, to evaluate Canadian transportation assistance, notably in the context of recent policy changes.

I. THE TRANSPORTATION SECTOR IN THIRD WORLD COUNTRIES

A. CHARACTERISTICS

Two preliminary points need to be made. First, no single transport system in the Third World can be considered self-sufficient. Each is part of a complex system of interpenetrating and interacting networks. Second, the Third World is powerfully influenced by, and greatly influences the developed economies. Many analyses attempt to isolate individual circulation or transport phenomena and examine them in isolation. Yet projecting in Third World from the world context often leads to confusion and misconception. It is mainly at the analysis of the overlaps and interfaces of the various kinds of transport activities that a better understanding of a Third World transport system is likely to develop.

An efficient circulation of commodities is a key element in the development of economies. Indeed, the range of needs resulting from the sophistication of national economies leads to the growth of exchanges between communities endowed with different environments or resources.

In developing countries the right of a minimum degree of mobility has two meanings: the provision of a minimum level of accessibility and the optimization of transport availability. Provision of accessibility points to processes operating at the level of the small community, the village, the household and the individual. People at different locations have the possibility to use resources and have opportunities for interaction. Optimization of transport availability, however, emphasizes broader forces more apparent at the macro scale (region, country and continent). The complete set of nodes and links are interconnected by rail, road, water or air transport and permit the flow of goods, people and information.

B. TRANSPORT DEVELOPMENT PROBLEMS

There have been many attempts at modeling the territorial evolution of transport systems that would eventually lead to the transport complexity of industrialized countries. But the idea that the transport evolution follows a linear progression molded on the development of industrial countries is highly debatable on the ground that the transport system of developed economies suffers from several malfunctions resulting from the complexity of technological systems operation, environmental pollution, energy costs, and the scarcity of functional land use allocated to transport infrastructures (Reichman, 1983). The principal impediments in recognizing the evolutionary stage of the transport sector is that there are many forms of circulation (Chapman and Mansell Prothero, 1983). These can be categorized according to the spatial dimension (rural or urban environment), the modal dimension (road, water, rail or air transport), the temporal dimension (daily, periodic, seasonal or long term) and the flow dimension (goods, people or information). Obviously, rather than being discrete or mutually exclusive, all four dimensions overlap, since they reflect the existing relations in a given

network. Besides, their complementary nature has been obscured by the complexity of the transport system at different places and times resulting from various ecological, social, behavioral, cultural, political and economic factors. There is thus a wide range of possible scenarios, but the modern transport system modeled on industrialized countries does not answer the needs of the Third World population. But in any case, the fact remains that in all these countries the transport sector is still in an early stage of development and is, with few exceptions, made up of low-cost transport with a view to provide a basic degree of mobility (Ocampo, 1982). In developing countries, the demand for transportation grows more quickly than the GNP. As a result, transport equipment and infrastructure is often the largest single investment.

In urban areas, the adoption of low-cost investment policies favors public transport, and thus alleviates polarized development. This in turn leads to a decrease in inequality of access. In rural areas, the same policies allow the development of local based economy with a minimum of exchanges. At the regional level, changes in socioeconomic conditions, such as the growth of inexpensive transport allows people to commute to wage employment rather than be absent for long periods. The integration of national economies into the world market, for its part, emphasizes the role of government in Third World countries as the development agent where foreign financial aid is centralized.

C. THE NEED FOR AID AND THE ROLE OF CANADA

Recent projections call for an increased transfer of transportation aid to Third World countries where colonization, diversity, distances and population growth accentuate problems of transportation and hinder the mobilization of resources for development (Carty and Smith, 1981).

The term transportation aid covers several types of financial resources made available to developing countries. There is a need to distinguish between: a) public transportation aid composed of direct assistance provided to developing countries or to multilateral institutions by government agencies; b) public transportation aid in loans extended over a given period of time and refundable in kind or in convertible currency; and c) varied public transportation assistance, namely, investments, project participation, export credits, etc. These contributions constitute bilateral aid when they represent direct flows between states, or multilateral aid when they transit through international agencies. Beyond that, there is a need to add the contribution of the private sector: industrial enterprise investments and aid granted by non-governmental organizations (NGO).

Canada is among several countries providing transport assistance. This is the result of three factors: a) Canada's expertise in transportation systems, b) the expectations of Third World countries from the industrialized Canadian economy, and c) the expectations of the developed countries involved in development assistance. Canada participates with other donor countries and international organizations in multilateral transportation assistance. But lending institutions, such as the World Bank, often adopt transport aid strategies toward the developing world which may counteract the Canadian bilateral policy of development for Third World countries. Canada has increased its funding for multilateral financial institutions. This country is keen to raise its voting stake in international agencies but change is likely to be slow and to come grudgingly. The Canadian percentage of votes in these organizations is very small when compared with the United States, Japan or the European Economic Community. It seems unlikely that the role and responsibilities of Canada will be raised in the near future as the existing

power brokers are unwilling to see their votes diluted. With the debt crisis, many Third World countries are strapped by austerity measures and find themselves unable to come up with the share of funds needed to finance developmental projects from international organizations. As a result, some countries are turning to cheaper, bilateral sources. The distribution of programs from the Canadian International Development Agency (CIDA) is relatively extensive (Sabourin, 1975; Bruneau, Jorgensen and Ramsay, 1978). CIDA has financed 140 transportation projects valued at more than CDN$ 920 million in over 40 countries since 1965. Only in 1986-1987, the Canadian country-to-country disbursement for the transportation sector was CDN$ 136.5 million or 8.7 % of the total Canadian bilateral aid (CIDA, 1987). The implementation of Canadian bilateral transport assistance projects is relatively well designed, and Canadian assistance to the Third World has been continuous and is oriented towards a long-term presence. But there are no studies available showing when Canadian transport aid would no longer be needed. This raises the issue as to how much territorial imbalance ought to be eliminated before a reversion of policy should set in, or more directly, at what stage a Third World transportation system no longer requires foreign transport assistance. True, there can be no short-term solution to transportation problems in developing countries since they basically require the restoration of efficient territorial structures. But the problem is not groundless since CIDA defines development as: "the process by which societies change so that they are able to meet the basic needs of their populations, in a way that is sustainable in the long term and is based largely on indigenous resources and values" (CIDA, 1987).

II. TRANSPORTATION IN LANDLOCKED DEVELOPING COUNTRIES

Against the common transport problems of developing countries, landlocked countries face specific problems connected with transit facility needs of transport infrastructure. Indeed, any break in a transport system, related to transshipment, gives rise to important terminal charges. A landlocked state is a country lacking direct territorial access to the sea. There are at present 26 landlocked states, excluding the European micro-states, and half of them are in Africa. In 1974, an expert group on the transport infrastructure for landlocked developing countries identified a close relationship between landlocked situation and least-developed status (UNCTAD, 1974). However, the landlocked situation between developed and developing landlocked countries should not be regarded as similar. The imprint of the traditional trade routes of developed countries can still be seen in the actual networks, while the colonial policies in Asia, Latin America and notably Africa distorted the traditional trade routes. For the Europeans, the main axis of travel in Africa was north-south while for Africans, the east-west routes were considered the main corridors. The routes which once crossed through Africa were thus fragmented by politics. More importantly, the old caravan routes were neglected in favour of highway development in the main cities catering essentially for local traffic. Many of the nomads left their desert home for the nation capital. As a result, many oases that allowed long distance travel and that were once tended, have been swallowed by the growing desert. The economies of many Third World countries were shaped with neighboring markets in mind. The influence of colonial powers and the establishment of political boundaries barred traditional routes. As a result, the trade that once bound together the peoples along both coasts of a continent almost disappeared (Franck and Brownstone, 1984).

In many landlocked countries, the main city can be located several hundred kilometres from the nearest seaport. Water transport cannot be overlooked as it remains the best means for bulk movement of goods over long distance, at minimum cost. The existing international trade depends heavily on water transport for the exchange of goods among the members of the world community (Vigarie, 1987). Even though on a world scale, foreign trade in Third World countries is marginal in terms of value, weight or volume; the Third World remains an important actor in commercial relations for simple reasons of demographic and territorial size. In landlocked countries, most transport costs start with the cost of transit. The reduction of such cost depends on an efficient inter-modal transport system. However, integrated transport facilities raise many issues related to modal transport and cooperation between landlocked and transit countries.

Short distance transport between urban and rural areas mutually benefiting both industry and agriculture in the production and circulation of small commodities depends essentially on highways. The quality of road transport has increased rapidly over the past years with the construction of all-weather roads and the improvement in vehicle performance. However, in many landlocked countries, most roads are concentrated in and around the main cities and often do not provide connections with each other (Mali, Nepal) or with the network of bordering countries (Chad and Libya, Angola and Zambia). Besides, road transport facilities are often incompatible with rail cargo handling. Railways are basic for carrying bulk commodities over long distances. But, in many developing countries, the basic problems are the lack of maintenance, the poor quality of the equipment and the important break-of-gauge between two rail networks which implies additional transshipment. Since the main concern of landlocked countries remains securing access to the sea,

this can be achieved by the use of a major, available and navigable river. But inland water transport for many landlocked countries is marked by many uncertainties, given the seasonal vicissitudes of many rivers located in tropical areas (Mekong, Oubangui, Niger and Parana rivers). Furthermore, transit country ports are often marked by congestion and the inadequacy of storage facilities. As such, they represent a serious problem for landlocked developing countries. Where river transport is not available, air transport can be used. But the role of airways in a country's foreign trade remains marginal. Besides, air transport demands important and costly infrastructures which are not readily available to Third World countries, notably in intermodal cargo handling facilities for the distribution of commodities. Many transport modes may be selected by landlocked countries, depending on various factors and the level of economic activities. But it is important to underline that the improvement of the transport system of landlocked countries must take into account the transport conditions of the transit countries.

Significantly, landlocked developing countries often have transit country neighbors characterized with similar economic development level. More importantly, an analysis of the international trade figures of the landlocked developing countries reveals that intra-regional trade is less important than trade with overseas countries. This is in sharp contrast with the figures for the main European landlocked countries which carry on a considerable proportion of their trade with their neighboring countries (Pant, 1974). This situation is the outcome of both the limited production patterns and the lack of transport facilities complementarity between landlocked and transit developing countries. Joint transport infrastructure development between landlocked and transit neighboring countries is thus required. Obviously, this strategy must be oriented towards the reduction of transshipment and the

development of alternative transit routes. This closer cooperation in transport facilities improvement, however, can impose important burden on already scarce domestic resources. As a result, many developing countries resort to foreign aid in the form of grants, loans, technical assistance and technological transfer. Canada recognizes its responsibility in this field and has provided significant transport assistance to developing countries.

III. CANADIAN RESPONSE

A. CHARACTERISTICS OF TRANSPORTATION AID

In the field of transportation, Canadian assistance is designed to overcome the various problems (financial, management, construction, maintenance, operational) and answer the transport needs of Third World countries with a view to achieve a certain degree of self-reliance (CIDA, 1986). Most of the Canadian transportation assistance is in the form of bilateral aid. This aid is a contribution without any debt formation. Bilateral aid is usually distributed in the form of tied aid, that is 80 % represent Canadian goods or services. The NGO are concerned with small projects promoting individual or collective development.

Table 1 reveals that the most populated and industrialized Third World countries receive a sizable amount of Canadian transport aid, while the poorest nations are granted little aid. There is a double correlation: aid/population and aid/gross internal product (GIP). The most important recipients of transport assistance in terms of volume are those that have a diversified economy. The most industrialized among the Third World countries have attracted a large amount of Canadian transport aid. Transport aid constitutes a small portion of their GIP. This is particularly the case of

TABLE 1

SELECTED INDICATORS FOR THIRD WORLD COUNTRIES, 1987

Country	GIP (US$ Million)	POP ('000)	DEBT (US$ Billion)	CIDA'S TRANSPORT AID/GIP (%)	CIDA'S TRANSPORT AID/POP (CND$)	DEPENDENCY (trade/ 2 x GIP) (%)
LATIN AMERICA						
Antigua and Barbuda	160	81	.063	7.21	142.00	163.8
Barbados	1180	254	.448	.86	40.00	36.5
Belize	180	170	.094	.26	3.00	59.4
Bolivia	3010	6550	3.340	.06	.26	18.5
Columbia	37610	28420	13.430	.0002	.003	11.9
Dominica	90	77	n.a.	18.28	214.00	47.8
El Salvador	3979	4910	.810	.05	.41	22.0
Grenada	90	113	.044	12.47	99.00	60.6
Jamaica	2090	2380	2.150	.29	3.00	37.3
Trinidad and Tobago	7140	1206	1.555	.07	4.00	18.9
ASIA						
Bangladesh	16100	100620	6.530	.55	.88	10.5
Indonesia	98400	166940	35.800	.06	.37	12.8
Nepal	2500	17140	.560	.28	.41	12.0
Pakistan	29700	99160	12.700	.19	.57	14.7

FRANCOPHONE AFRICA						
Benin	1080	4040	.007	.84	2.24	23.7
Burkina Faso	1080	6750	.539	4.51	7.21	15.6
Cameroon	11551	10450	2.871	.86	9.53	16.4
Congo	1910	1790	2.420	1.23	13.15	33.5
Gabon	3465	1170	1.170	.006	.17	23.5
Guinea	1950	6210	1.380	.90	2.83	24.8
Ivory Coast	6250	10180	.006	.29	1.77	37.8
Mali	1070	8440	1.469	2.86	3.63	29.4
Mauritania	700	1950	1.477	.65	2.34	43.4
Niger	1250	6280	1.155	3.09	6.15	23.1
Rwanda	1730	6270	.351	.21	.58	10.1
Senegal	2400	6600	2.400	.68	2.47	34.5
Zaire	5220	31240	5.851	.19	.31	18.8
ANGLOPHONE AFRICA						
Botswana	900	1130	.336	1.30	10.39	85.7
Egypt	32200	49610	40.000	.11	.71	18.2
Ghana	4960	14040	.002	.30	1.07	16.6
Kenya	5960	21160	4.219	.39	1.11	23.6
Lesotho	730	1570	.176	.37	1.72	27.3
Malawi	1222	7280	.988	4.12	6.91	20.8
Nigeria	64900	98400	.020	.03	.21	9.4
Sudan	7350	22170	6.330	.03	.10	15.4
Tanzania	5840	22460	3.609	1.23	3.19	12.0
Zambia	2620	6850	4.483	1.31	5.00	26.4

Source: F. GEZE et al., L'État du Monde: Annuaire économique et géopolitique mondial, Paris and Montréal, La Découverte et Boréal, 1987.

Asian countries. Africa and Latin America do not appear as privileged. Even though the volume of transport aid is small, the assistance produces economic dependency simply by increasing the dependency of national economies on foreign trade. The distribution of transport aid per capita corrects this impression by favoring island nations of the Caribbean: Dominica, Antigua and Barbuda, Grenada, and Barbados. These nations constitute a particular group of Commonwealth countries characterized by the importance of the tourist industry and the agricultural sector. With the exception of these countries, the Canadian transportation aid is less than CDN$ 14.00/per capita/per country. More insight may be gained by examining the duration of CIDA's transportation aid projects (CIDA, 1987).

B. TRANSPORT AID

The Canadian transport aid has fluctuated over the past decades as a result of political development both in Canada and in the Third World. The evolution can be divided roughly into four phases. The first period, 1965-1970, was one of slow development and growth in which bilateral Canadian transport extensions during those years were provided only to Jamaica. During the second stage, 1970-1975, the magnitude and distribution of Canadian transport aid expanded rapidly. During these years, 25 projects were undertaken in over 16 countries. The political groundwork for expanding cultural, political and economic relations was developed in the earlier years of the period. The emphasis of the Canadian transport aid shifted to Africa, as many new African states achieved political independence during the past decade and became receptive to Canada's overtures. Most of the Canadian transport assistance went primarily to countries of equatorial Africa namely, Cameroon, Congo, Zaire and Kenya. Besides, three enclaved countries were part of the Canadian transport aid: Mali, Botswana and Malawi. These years also

witnessed a diversification of transport aid to mineral producing countries (Nigeria, Ghana, Bolivia), agricultural nations (El Salvador, Belize, Bangladesh) and to states relying heavily on the tourist industry (Barbados, Trinidad and Tobago). As the approach to aid was maturing rapidly, Canadian transport assistance commitments soared in 1975-1985. Canada not only increased its transport aid sharply during this period but gained respectability through it. While rendering transport assistance, Canada succeeded in establishing a long-term presence in the Third World and in having normal state-to-state relations. Indeed, bilateral aid is a tool of Canadian foreign policy to create links with other countries. However, it is important to underline that new transport commitments to countries of Central and South America, as well as to Nigeria, fell to nothing during that decade. The general receptivity to Canadian transport aid in these areas declined sharply in the mid-seventies. The instability of many of the regimes made enduring relations with Canada extremely difficult and accelerated the decline of the Canadian transport assistance, as these governments became more preoccupied with internal affairs. Since 1985, there has been a shift of emphasis in the Canadian transport aid. In the broad sense, it appears that Canada is now extending transport assistance to regional Third World organizations like the Caribbean Community, the Senegal River Development Organization, and the South African Development Coordinating Conference. The history of the last decades has clearly illustrated the need of economic integration for many Third World countries whose national economies are individually highly vulnerable to the fluctuations of the world market. Regional integration represents a means to insure the complementarity of various economies and to increase their power and their autonomy. In this perspective, this commitment of Canadian transport aid is consistent with the emergence of regional economic cooperation.

C. MAGNITUDE AND DIRECTION OF TRANSPORT AID

An examination of the direction of Canadian transportation aid reveals certain contrasts of distribution on a world scale. Firstly, with regards to landlocked developing countries, those located the furtheat inland at the end of transport systems appear to receive more Canadian transport assistance. But the assistance granted to landlocked countries accounts for only 24.9 % of the total amount of transportation aid, while not more than 43.1 % has been extended to landlocked and transit countries altogether. It is important to underline that transport assistance to landlocked countries has not always been granted with corresponding modal transport assistance extended to the main transit country or territory. Indeed, an analysis of the Canadian transport assistance reveals that Bolivia, Nepal, Niger, Rwanda, Malawi, Botswana and Lesotho have not been the object of coordinated regional approach with their transit neighbors. But, transport assistance granted, on the one hand, to Senegal, Mali, Burkina Faso and Ivory Coast and, on the other hand, to Zambia and Tanzania, appears to have been planned with a view to territorial integration by extending corresponding networks, thus reducing transshipment. This strategy is partly reflected in Canada's involvement in secondary road construction and route link between the cities of Po-Ziou and Zabre-Manga in Burkina Faso, and in transport assistance extended to support the Mali state-owned railway company.

Secondly, Africa receives a voluminous amount of transportation aid. Over 68 % of the total transportation assistance extended since 1965 was made available to African countries. More specifically, 35 % of the transport aid committed has been extended to landlocked countries of Africa. Table 2 shows that rail and road transport projects represented 41 % and 35 % respectively of CIDA's disbursements in Francophone Africa. Almost 30 % of CIDA's transport

TABLE 2

CIDA'S TRANSPORTATION PROJECT DISBURSEMENTS BY MODE TO FRANCOPHONE AFRICA

AUGUST 1971-JULY 1987

(CND $)

	airways	waterways	highways	railways	total
Benin		9 065 995			9 065 995
Burkina Faso			34 674 035	14 000 000	48 674 035
Cameroon		35 948 038	23 840 855	39 759 213	99 548 106
Congo	3 598 562			19 948 455	23 547 017
Francophone Africa Regional	3 296 178				3 296 178
Gabon				200 000	200 000
Guinea	17 553 792				17 553 792
Ivory Coast				18 012 228	18 012 228
Mali		2 650 470		28 002 790	30 653 260
Mauritania			4 559 734		4 559 734
Niger			38 600 116		38 600 116
Rwanda	3 647 630				3 647 630
Senegal				16 313 961	16 313 961
Senegal River Development Organization		8 795 506			8 795 506
Zaire			9 804 481		9 804 481
Total	28 096 162	56 460 009	111 479 221	136 236 647	332 272 039

Source: CIDA, Corporate Memory (BIFS), Projects Listing by Country, Ottawa, CIDA, July 1987.

extensions in Francophone Africa is committed to a single country: Cameroon. Canada is involved in the construction of the TransCameroon railroad and the Douala-Yaounde highway. It has also extended more than CDN$ 35 million for the construction of the Douala harbour. More than 10 % of the total transport aid granted to Francophone Africa has been allocated to that project. This represents the largest commitment ever undertaken by CIDA for water transport. In Anglophone Africa, more than three quarters of the total Canadian transport aid has been extended to rail transport (table 3). And 23 % of the total transport budget has been allocated to the railway system of Tanzania. This compares with the total amount granted to road, water and air transport in Anglophone Africa. Furthermore, when considered together, Tanzania and Zambia account for over 35 % of CIDA's total transport project disbursements to Anglophone Africa. Besides rail construction, the main efforts of CIDA in the region are related to the maintenance and the construction of access routes in rural areas.

Thirdly, with the exception of three countries of South Asia (Bangladesh, Pakistan and Nepal) and one country of South-East Asia (Indonesia), the rest of the continent does not appear to be an important beneficiary of the Canadian transportation assistance. In Asia, the overwhelming share (80 %) of Canadian transport assistance has been allocated to the construction of railroads (table 4). The Bangladesh railway program represents CIDA's largest single financial commitment for a Third World country transport aid project. CIDA's involvement in rail transport includes the South Sumatra coal transport as well as the locomotive rehabilitation in Pakistan. Transport aid in the field of highways has gone exclusively to finance the construction of the Banda Aceh-Meulaboh highway in Indonesia. In Nepal, where surface transport is constrained by difficult topography and the investment in

TABLE 3

CIDA'S TRANSPORTATION PROJECT DISBURSEMENTS BY MODE TO ANGLOPHONE AFRICA

MARCH 1971-JULY 1987

(CND $)

	airways	waterways	highways	railways	total
Botswana			5 143 800	6 598 168	11 741 968
Egypt				35 031 397	35 031 397
Ghana			14 955 650		14 955 650
Kenya			16 457 089	6 925 719	23 382 808
Lesotho	2 465 525		240 000		2 705 525
Malawi			247 500	50 075 490	50 322 990
Nigeria		99 200		20 508 600	20 607 800
South African Development Coordinating Conference				32 842 831	32 842 831
Sudan			2 266 351		2 266 351
Tanzania			1 464 872	70 077 038	71 541 910
Zambia			27 778 880	6 490 529	34 269 409
Total	2 465 525	99 200	68 554 142	228 549 772	299 668 639

Source: CIDA, Corporate Memory (BIFS), Projects Listing by Country, Ottawa, CIDA, July 1987.

TABLE 4

CIDA'S TRANSPORTATION PROJECT DISBURSEMENTS BY MODE TO ASIA

NOVEMBER 1972-JULY 1987

(CND $)

	airways	waterways	highways	railways	total
Bangladesh				88 058 156	88 058 156
Indonesia	14 776	13 908	30 155 737	31 869 737	62 054 158
Nepal	7 042 368				7 012 368
Pakistan		5 155 387		51 301 773	56 457 160
Total	7 057 144	5 169 295	30 155 737	171 229 666	213 611 842

Source: CIDA, Corporate Memory (BIFS), Projects Listing by Country, Ottawa, CIDA, July 1987.

transport infrastructure is excessive in relation to traffic potential, Canadian transport assistance has been extended towards the development of air transport as a means of national integration.

Fourthly, table 5 reveals that, in Latin America, approximately 60 % of total transport aid has been allocated to the Commonwealth island nations of the Caribbean, while the rest of Latin America receives minimal transport assistance from Canada. As was mentioned above, CIDA's bilateral transport aid covers four modes namely, air, water, road and rail transport. But, in Latin America, about 70 % of Canadian transport aid has been extended for the construction of airport facilities and air service in the Caribbean islands. These island economies benefit significantly from international tourism and the production of perishable goods (tropical fruits, vegetables, flowers, etc.). The ability to derive such benefits depends to a large extent on suitable air transport. There is a need however to evaluate whether Canadian role in transport assistance reflects Canada's capabilities in transportation.

IV. EVALUATION OF CANADIAN TRANSPORTATION AID POLICY

CIDA activities in the transport sector is an important tool for strengthening relations with Third World countries. In the Third World, Canadian transport assistance has already enabled Canada to establish a strong presence in many countries and to broaden the base of exchange between Canada and developing countries. Besides, transport aid is a very effective tool available for expanding Canadian influence in these countries and for publicizing Canadian transportation products and techniques which may later be sought after commercially. The volume of transport aid commitments has fluctuated with political and economic changes both in Canada and in the Third

TABLE 5

CIDA'S TRANSPORTATION PROJECT DISBURSEMENTS BY MODE TO LATIN AMERICA

FEBRUARY 1965-JULY 1987

(CND $)

	airways	waterways	highways	railways	total
Antigua & Barbuda	9 858 774	1 678 897			11 537 671
Barbados	10 189 000				10 189 000
Belize			460 000		460 000
Bolivia			1 717 000		1 717 000
Caribbean Regional	33 288 620	294 468			33 583 088
Columbia		92 343			92 343
Dominica		898 604	15 551 890		16 450 494
El Salvador		2 000 100		10 000	2 010 100
Grenada	11 223 280				11 223 280
Jamaica	62 800		5 606 102	434 300	6 103 202
Leeward & Windward Regional		5 755 042			5 755 042
Saint Christopher and Nevis	2 910 165				2 910 165
Trinidad and Tobago	4 346 301	754 200			5 100 501
Total	71 878 940	11 473 654	23 334 992	444 300	107 131 886

Source: CIDA, Corporate Memory (BIFS), Projects Listing by Country, Ottawa, CIDA, July 1987.

World. A modal distribution of Canadian transportation assistance reveals that railways have been the largest recipient with 56 % followed by highways (25 %), airways (11 %) and waterways (8 %). Besides, Canada's involvement in transportation in any one country tends to focus on a single mode in 23 of the 39 countries reviewed. In fact, one single mode accounts for over 80 % of financial commitments in all but five countries. This is also reflected in the regional disbursements with only Francophone Africa showing a relative balance among different modes. The duration of transport projects ranges from one month to over 14 years, but most of CIDA's transport projects are completed under a five-year period. Furthermore, the transport aid requirements of Third World countries in terms of management, technology and costs can easily be met by Canada.

Canada's transportation assistance has been aimed at fulfilling territorial, social and economic objectives in Third World countries which may explain the apparent complexity in modal geographical distribution. Rail and road transport are favored in Asia and Africa, while major extensions are granted to waterways in Francophone Africa and to airways in Caribbean countries. Furthermore, these objectives of Canadian transportation assistance are not mutually exclusive but complementary. Firstly, transportation is a process that creates the very channels that allow territories to become systems of interaction and development. The Canadian financial and technical transport assistance proved to be an important catalyst in coordinating transport systems between landlocked countries and their transit neighbors, notably in North-West and South-East Africa. Secondly, transportation is linked with the process of production, where it manifests itself as the process of transferring energy, commodities, people and information. Canada transport extensions have facilitated many Third

World countries in reaching distances towards frontier areas, particularly with the development of rail transport. This strategy rests on the extraction of minerals located in the interior which may encourage local production, re-equilibriate the balance of payment, and increase financial resources for local development projects. Thirdly, transportation is related to social development. The Canadian transport assistance has contributed to national unity by increasing contacts between minority groups with rail, road or air transport; it has integrated women into the development process by encouraging their participation in transport related projects; and it has reduced urban-rural disparities by emphasizing access routes in rural areas.

It is important to underline that there is no expressed Canadian transportation aid policy at CIDA. The transport projects are a product of regional or country specific aid programming. At best, some of the main objectives of Canada development assistance require adequate transportation services. The Canadian transportation assistance is reactive. The aid given to a country in the field of transportation is a response to request emanating from a developing countries' perceptions of the experience and capabilities of Canadian industry in the transportation sector. The primacy of rail in modal distribution of aid comes as no surprise since Canadian capabilities in rail industry is generally strong. Canada has developed a high degree of technology in its rail, road, marine and aviation equipment, infrastructure and management. Therefore, any shift in emphasis or development of any or all modes within Canada may affect the perceptions of needy countries with regards to Canadian know-how in the transport sector.

Transportation is a link, an industry and a service. All modes do provide components of a modern economy. Transportation thus plays a key role

in development. But transport assistance also has its limits, notably in forming and maintaining regional integration and cooperation which may prove to be more satisfactory in the pursuit of efficient transport systems within the Third World. Recent changes in CIDA's transportation aid are aimed at correcting these limits.

Three areas of change can be identified: internal structure of the Canadian assistance program, policy reorientation and geographical distribution. With the creation of the Ministry of External Relations overlooking the Canadian assistance program in the mid-eighties, CIDA has reinforced more effectively the concept of self-sufficiency since it can act more independently and have more impermeability to other developmental, political and economic interest of the Canadian government. CIDA is thus in a better position to conciliate political, economic and humanitarian objectives which are very often contradictory. Consequently, CIDA will be expected to take on new tasks, ranging from structural territorial adjustment in developing countries to transportation network construction. Besides, a recent study has underlined development issues related to Canadian transport assistance (Hickling, 1988). The main objectives are: a) to develop the transport sector as an essential service; b) to contribute to the development of rational and cost efficient transport system; c) to provide comprehensive planning and programming to transport needs. As a result, the Canadian assistance program will require detailed geographical and transport analysis and associated policy advice. This could lead to problems as it seems unlikely that CIDA will increase its staff substantially. Undoubtedly, the new transportation assistance will vary according to the political, economic, social and cultural transformations both inside and outside Canada. One of the priority fields of assistance will be development services and

institutional cooperation. The agency wants to pay particular attention to training of personnel, to the integration of women into the development process and to the environmental impact of various projects, notably transportation. Besides, CIDA has identified specific objectives with regards to institutional cooperation: a) to contribute to the strengthening of various institutions in developing countries by encouraging university linkage projects; b) to allow developing countries to have access, through cooperative projects, to expertise and resources available in Canadian universities that can provide solutions to developmental needs; c) to encourage contacts between Canadian and developing countries' institutions in order to promote a better understanding between nations. In the field of transportation, this orientation will allow technological transfer, especially with regards to network planning and management, pricing policy and regulation which are of paramount importance in an assistance program aimed at self-sufficiency. Besides, technical training in the field of transport provides crucial instructions for the maintenance of a transportation system, thus avoiding costly corrective measures in the future.

Canada will also have to focus its transportation assistance in two field that have been heretofore neglected. Firstly, a growing percentage of the population of developing countries is living in urban areas, but urban transport cannot meet the demand. Canada is a world leader in the development of software technologies for the planning and evaluation of urban transport systems. But Canadian transport assistance has not been active in the urban transport sector. Secondly, recent trends in the transport sector emphasize the integration of all modes. As a result there is a need for increasing assistance of Canada to developing countries in containerization and intermodal transportation projects.

The next decade will see the Canadian transportation assistance considerably enhanced in terms of geographical coverage. Canada will likely provide aid to groups of nations by promoting close cooperation between neighboring developing countries. This is a very effective way of promoting regional dynamic initiative. Indeed, in the near-term the focus of Canadian transportation aid is likely to be extended to Asian countries other than those currently receiving aid. Part of the reason lies in Canada's interest in one of the world's most dynamic regions. The transport sector should allow Canada to dialogue with the burgeoning Asian community and to participate more fully in the evolving global economy. There will thus be a need for a general increase in capital if Canada is going to do more in countries like India and China. Few recipient countries are likely to argue with these changes. It is the capacity and the willingness of Canada to help them in achieving self-reliance which really counts.

Very often transport aid-requesting countries do not have basic plans for their medium and long-term development. In the absence of such basic plans, these countries tend to make punctual aid requests, pursue large amounts of assistance, adopt projects proposed by the private sector and fail in making effective use of transport assistance projects. Indeed, many countries are eager to obtain large amounts of transport assistance and tend to request assistance which is not suitable for them in terms of value and volume. In view of this, the shift of emphasis of the Canadian transportation assistance might eliminate many difficulties by enhancing cooperation with Third World countries' regional organization. Inter-state cooperation could possibly outperform individual efforts. Cooperative participation in transport related projects designed to benefit an entire region can increase regional integration. Furthermore, this type of transport aid could help set

priorities for development projects proposed during regional cooperation-promotion processes, and make headway in multinational cooperation. Under these conditions, transport assistance can lead to the discovery of hitherto hidden development prospects.

CONCLUSION

Transport aid varies among Third World countries. While some emphasize territorial issues, others will debate on modal choice as a means to eliminate poverty. This paper underscores the constraints and problems related to long-term transport aid. This does not preclude Canadian transport aid from being a tool for self-development in Third World countries. However, it is important to acknowledge the limits imposed by this strategy, and not to exaggerate its potential. For even though there is a need for transport aid at the present, the effective necessary quality of transport assistance is more important than the quantity required to fulfill the transport need of developing countries. Besides, recent studies point to the emerging reality of the existing global networks and indicate a shift in emphasis towards the development of telecommunication systems (Gottman, 1989). Under these conditions, the selection and successful implementation of transport assistance project will rest on continuous information and research of comprehensive transport system needs of developing countries.

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